

**CULTURAL RESOURCES SURVEY OF THE
POOLES MILL TO PELION 115kV
TRANSMISSION LINE,
LEXINGTON, AIKEN, AND ORANGEBURG,
COUNTIES, SOUTH CAROLINA**



CHICORA RESEARCH CONTRIBUTION 424

CULTURAL RESOURCES SURVEY OF THE POOLES MILL TO PELION 115kV TRANSMISSION LINE, LEXINGTON, AIKEN, AND ORANGEBURG COUNTIES, SOUTH CAROLINA

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ABSTRACT

This study reports on an intensive cultural resources survey of an approximately 17 mile corridor that follows the North Fork Edisto River at the corner of Lexington, Aiken, and Orangeburg Counties, South Carolina. The work was conducted to assist Central Electric Power Cooperative in complying with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The corridor is to be used by Central Electric Power Cooperative for the construction of a transmission line. The transmission line will connect to an existing transmission line in Orangeburg County and to an existing transmission line in Lexington County, next to the Pelion Substation. The topography is undulating with drops in elevation at the various drainages throughout the corridor.

The proposed route will require the clearing of the corridor, followed by construction of the proposed transmission line. These activities have the potential to affect archaeological and historical sites that may be in the project corridor. For this study an area of potential effect (APE) 0.5 mile around the proposed transmission line was assumed.

An investigation of the archaeological site files at the S.C. Institute of Archaeology and Anthropology identified two previously recorded sites (38LX245 and 38LX323). Site 38LX245 is an Early Archaic to Woodland site recorded in 1982. No eligibility status was given on the site form (recorded by G.L. Thomas). Site 38LX323, also known as the Coopers Creek Site, is an Early Archaic to Late Woodland site that is recommended potentially eligible for the National Register of Historic Places. Unfortunately a golf course is now located on the property, so it is unknown if any of the site remains.

The S.C. Department of Archives and History GIS was consulted for any previously recorded sites. Seven sites (408-0768, 408-0769, 408-0770, 533-1018, 533-1020, 533-1021, and Convent Baptist Church) were located. Of the three counties, only Aiken County has had a comprehensive architectural survey performed, but this survey is thought to be complete. All of the previously recorded sites, with the exception of Convent Baptist Church, are located in Aiken County. Convent Baptist Church is located in Lexington County and was identified in a survey of above ground structures taking place between 1990 and 1998.

Site 408-0768 is a c. 1935 house; 408-0769 is the c. 1935 Bodie School; 408-0770 is the c. 1900 Lucas Cemetery; 533-1018 is a c. 1915 house; 533-1020 is a c. 1915 house; and 533-1021 is a c. 1930 house. All of these Aiken County sites and the Lexington County Convent Baptist Church were recommended not eligible for the National Register.

The archaeological survey of the corridor incorporated shovel testing at 100-foot intervals along the center line of the 75-foot right-of-way, which was marked by stakes. All shovel test fill was screened through ¼-inch mesh with a total of 875 shovel tests excavated along the corridor.

As a result of these investigations no sites were identified. This is likely due to the lack of any distinct ridge tops; distance from a permanent water source; and steep, excessively drained soils.

A survey of public roads within a 0.5 mile of the proposed undertaking was conducted in an effort to identify any architectural sites over 50 years old which also retained their integrity. No such sites were found in Aiken County, which is consistent with the architectural survey (Fick and

Schneider 1988). No additional sites were found in Lexington and Orangeburg Counties that appear to be eligible for the National Register of Historic Places.

Finally, it is possible that archaeological remains may be encountered in the project area during clearing activities. Crews should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office or to Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No construction should take place in the vicinity of these late discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

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INTRODUCTION

This investigation was conducted by Dr. Michael Trinkley of Chicora Foundation, Inc. for Mr. Tommy L. Jackson of Central Electric Power Cooperative in Columbia, South Carolina. The work was conducted to assist Central Electric Power Cooperative comply with Section 106 of the National Historic Preservation Act and the regulations codified in 36CFR800.

The project site consists of a corridor measuring about 17 miles for use as a transmission line, situated along the North Fork Edisto River at the corner of Lexington, Aiken, and Orangeburg Counties, South Carolina (Figure 1). The corridor connects to an existing transmission line in Orangeburg County (on Saddlecreek Lane) and extends to an existing transmission line in Lexington County next to the Pelion Substation on SC 178 (Fairview Road).

The corridor consists of undulating topography that dips in elevation at the various drainages along route. Vegetation along the corridor consists of a mixed pine and hardwood forest, planted pines, fallow fields, and low, wetland areas.

The corridor, as previously mentioned, is intended to be used as a transmission line. Landscape alteration, primarily clearing and construction, including erection of poles, will damage the ground surface and any archaeological resources that may be present in the survey area. Construction and maintenance of the transmission line may also have an impact on historic resources in the project area.

The project will not directly effect any historic structures (since none are located on the survey corridor), but the completed line may detract from the visual integrity of historic properties, creating what some consider

discordant surroundings. As a result, this architectural survey uses an area of potential effect (APE) 0.5 mile radius around the proposed corridor.

This study, however, does not consider any future secondary impact of the project, including increased or expanded development of this portion of Lexington, Aiken, and Orangeburg Counties.

We were requested by Mr. Tommy L. Jackson of Central Electric Power Cooperative to perform a cultural resources survey in February of 2005. This included examination of the site files at the S.C. Institute of Archaeology and Anthropology. As a result of that work, two previously identified sites (38LX245 and 38LX323) were found.

Site 38LX245 is an Early Archaic to Woodland site recorded in 1982. No eligibility status was given on the site form (recorded by G.L. Thomas). Site 38LX323, also known as the Coopers Creek Site, is an Early Archaic to Late Woodland site that is recommended potentially eligible for the National Register of Historic Places. Unfortunately a golf course is now located on the property, and we identified no indication that a cultural resource study had been conducted prior to construction. The condition of the site is not documented, but it has probably been destroyed.

Initial background investigations also incorporated a review of the site files at the South Carolina Department of Archives and History. As a result of that work, seven sites (408-0768, 408-0769, 408-0770, 533-1018, 533-1020, 533-1021, and Convent Baptist Church) were identified in the 0.5 mile APE. Of the three counties, only Aiken County has had a comprehensive architectural

CULTURAL RESOURCES SURVEY OF THE POOLES MILL TO PELION 115kV TRANSMISSION LINE

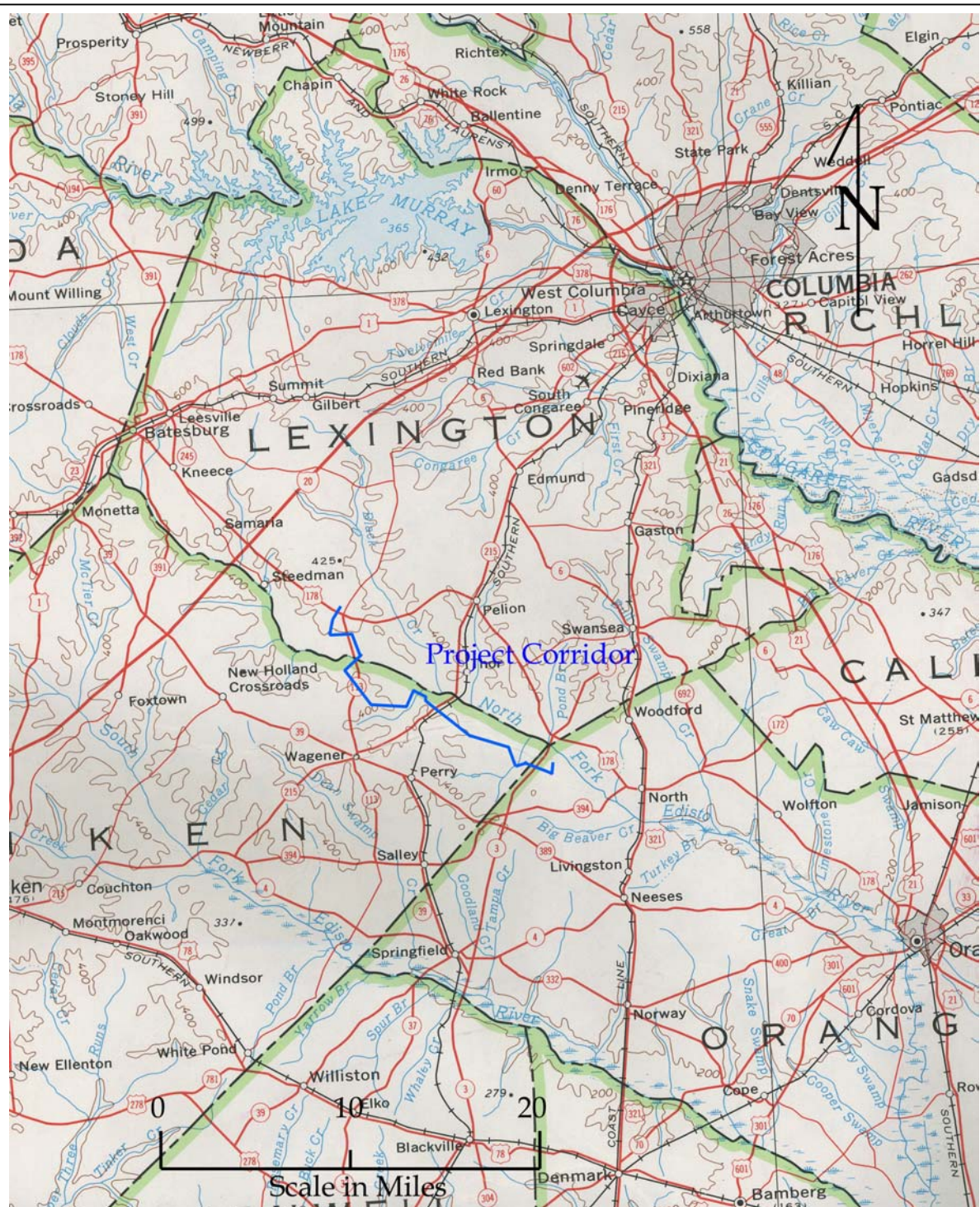


Figure 1. Project vicinity in Lexington, Aiken, and Orangeburg Counties (basemap is USGS South Carolina 1:500,000).

Figure 2. Survey corridor and previously identified archaeological and architectural sites (basemap is USGS Aiken 1:100,000).

survey performed, but this survey is thought to be complete (Fick and Schneider 1988). All of the previously recorded sites, with the exception of Convent Baptist Church, are located in Aiken County. Convent Baptist Church is located in Lexington County and was identified in a survey of above ground structures taking place between 1990 and 1998.

Site 408-0768 is a c. 1935 house; 408-0769 is the c. 1935 Bodie School; 408-0770 is the c. 1900 Lucas Cemetery; 533-1018 is a c. 1915 house; 533-1020 is a c. 1915 house; and 533-1021 is a c. 1930 house. All of these Aiken County sites and the Lexington County Convent Baptist Church were recommended not eligible for the National Register.

Archival and historical research was limited to a review of secondary sources available in the Chicora Foundation files.

The archaeological survey was conducted from March 1-8, 2005 by Ms. Nicole Southerland and Ms. Julie Poppell under the direction of Dr. Michael Trinkley.

This report details the investigation of the project area undertaken by Chicora Foundation and the results of that investigation.

ENVIRONMENTAL BACKGROUND

Physiography and Geology

The project corridor is located along the North Fork Edisto River at the corner of Lexington, Aiken, and Orangeburg counties.

Aiken County is located midway between the mountains and the coast. On the west the County is separated from Georgia by the Savannah River. To the north it is bordered by Edgefield and Saluda counties. To the east lies Lexington County with the border established by Chiquapin Creek and the North Edisto River. To the south Aiken County is bordered by Barnwell and Orangeburg counties.

Lexington County is bounded to the north by Newberry County, to the east by Richland and Calhoun counties, to the south by Orangeburg County, and to the west by Aiken and Saluda counties.

Orangeburg County is bounded to the north by Calhoun and Clarendon counties, to the east by Berkeley County, to the south by Dorchester County, and separated by the South Fork Edisto River to the southwest are Bamberg and Barnwell counties.

The topography varies dramatically as one moves from the Southern Coastal Plain in the southeastern portion of the state, which is nearly level to gently sloping, into the Carolina Sandhills, which

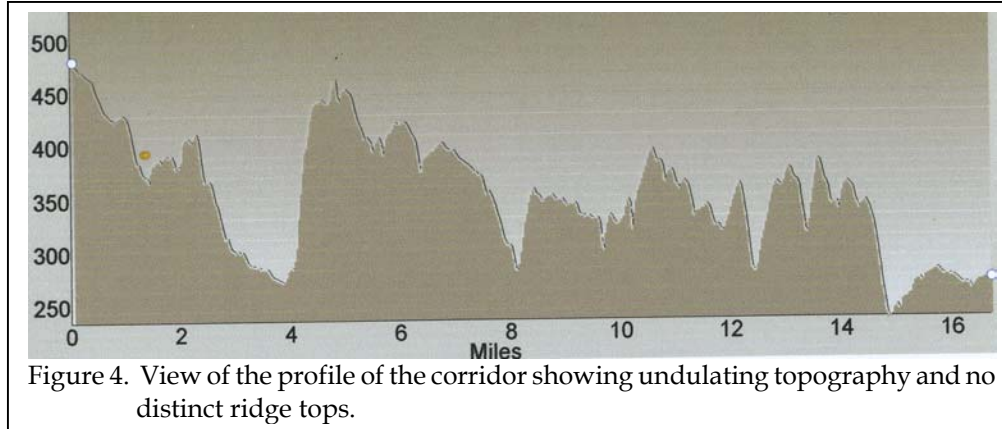
are characterized by more moderately steep topography.

The project area is found in the area typically called the Sandhills. The project area is undulating with drops in elevation toward the various drainages including the Edisto River, Hollow Creek, and Giddy Swamp Creek. Elevations in the study area are about 235 to 480 feet AMSL (Figure 4).

The Carolina Sandhills extend somewhat intermittently across the midlands of South Carolina, just below the fall line, in an irregular belt 5 to 30 miles wide. The fall line itself was sculpted by the strong erosion of rivers and streams passing from the hard crystalline bedrocks of the Piedmont into the loose, unconsolidated sands of the Coastal Plain. It is along this fall line where the rapidly descending rivers form shoals.



Figure 3. View of a pasture along the transmission corridor.



The relationship of the Sandhills to these related physiographic features has been long debated, with a common explanation being that the Sandhills are the remnants of former beaches of the Cretaceous period about 130 million years ago (Barry 1980:97). Arguing against this, however, is the realization that in many areas, the Sandhills are higher than the adjacent Piedmont. It seems more likely that this region represents the highly weathered, and discontinuous, remnants of the continental phase of the Tuscaloosa formation which dates back to the Mesozoic (Duke 1961).

Regardless, these questions of geology have little impact on the use of the Sandhills by either prehistoric or historic people. More important to our understanding of past lifeways are the soils, climate, and flora of the Sandhills.

Soils

From a soils perspective the Sandhills tend to be characterized by excessively drained sands found on 2 to 15% slopes and ridges. Well drained to moderately well drained medium to fine textured soils with slightly compacted subsoils are

found at the base of these slopes, although still on gently sloping topography.

Excessively drained soils with loamy, compact subsoils are typically found on positions where the slopes break to meet the streams. Overall, inherent

fertility and organic content of the soils are low. Leaching of plant nutrients is rapid and the soils are strongly acid. These features tend to give the Sand Hills a rather bleak and monotonous landscape.

In the project corridor, fifteen soil series are found, ranging from very poorly drained to well drained, and several excessively drained soils.

The very poorly drained soils, known as the Johnston Series, are found in the low areas next to permanently wet water sources, such as the Edisto River. These soils have an A horizon of



Figure 5. View of planted pines along the corridor.



Figure 6. View of Hollow Creek.

black (N2/0) sandy loam to over two feet in depth.

One poorly drained soil is found on the corridor, Lumbee sandy loam. This soil has an A horizon of dark gray (10YR4/1) loamy sand to 0.7 foot over a light brownish gray (10YR6/2) sandy loam to 1.1 foot in depth.

The soils then jump to moderately well drained, which include Pelion loamy sand and Goldsboro sandy loam. The Pelion Series has an A horizon of grayish brown (10YR5/2) loamy sand to a depth of 0.4 foot over a pale brown (10YR6/3) loamy sand to 0.8 foot in depth. Goldsboro soils have an Ap horizon of dark grayish brown (2.5Y4/2) sandy loam to 0.7 foot in depth over a light yellowish brown (2.5Y6/4) sandy loam to a depth of 1.3 feet.

Seven well drained soils are found throughout the corridor, including Fuquay sands, Troup sands, Orangeburg loamy sands, Ochlockonee sandy loams, Lucy loamy sands, Vaucluse loamy sands, and Blaney sands. Fuquay sands have an A horizon of very dark gray (10YR3/1) sand to 0.2 foot over a dark grayish brown (2.5Y4/2) sand to 0.7 foot in depth. The subsoil is a light yellowish brown (10YR6/4) sand to 2.0 feet in depth. Troup soils have an Ap horizon of dark grayish brown (10YR4/2) sand to a depth of 0.5 foot over a brownish yellow

(10YR6/6) sand to a depth of about 2.7 feet. Orangeburg soils have an Ap horizon of dark grayish brown (10YR4/2) loamy sand to a depth of 0.7 foot over a yellowish brown (10YR5/4) loamy sand to 1.0 foot in depth. The Ochlockonee Series has an Ap horizon of dark brown (7.5YR4/4) sandy loam to 0.5 foot in depth over a dark reddish brown (5YR3/4) sandy loam to 0.8 foot in depth. Lucy soils have an Ap horizon of brown (10YR5/3) loamy sand to a depth of 0.7 foot over a brownish yellow (10YR6/6)

sand to 1.4 feet in depth. Vaucluse soils, also the steepest soils with a slope as high as 25%, have an A horizon of brown (10YR5/3) loamy sand to 0.2 foot in depth over a brownish yellow (10YR6/6) loamy sand to 0.8 foot in depth. Blaney sands have an A horizon of very dark gray (10YR3/1) sand to 0.2 foot over a dark grayish brown (2.5Y4/2) sand to 0.7 foot. The subsoil is a pale brown (10YR6/3) sand to 2.1 feet in depth.

The remaining four soil types are excessively drained and include Lakeland sands, Alpin sands, Blanton sands, and Alaga loamy sands. Lakeland sands have an A horizon of dark gray (10YR4/1) sand to 0.2 foot over a grayish brown (10YR5/2) sand to 0.7 foot in depth. Alpin soils have an A horizon of dark gray (10YR4/1) sand to 0.3 foot over a very pale brown (10YR7/4) sand to 1.0 foot in depth. Blanton soils have an A horizon of very dark grayish brown (10YR3/2) sand to 0.4 foot in depth over a yellowish brown (10YR5/4) sand to 2.8 feet in depth. The Alaga Series has an Ap horizon of dark brown (10YR3/3) loamy sand to 0.8 foot over a strong brown (7.5YR5/6) loamy sand to a depth of 1.7 feet.

Lexington, Aiken, and Orangeburg Counties are just outside the area studied by Trimble (1974), although adjacent Edgefield County was found to have lost over a foot of soil

to erosion and the study area is part of the Cotton Plantation Area, recognized for its high Antebellum erosive land use with Postbellum continuation. This area, because of the nature of the soils, the type of agricultural products grown, and the form of tenancy common, suffered the greatest erosion in the South. Lowry (1934) found that the level sandy soils of the region suffered moderate sheet erosion. Based on this information it seems likely that the study corridor has suffered some degree of erosion. This is consistent with the truncated soil profiles commonly encountered during this study.

Climate

Moving to the climate, this portion of South Carolina is affected by the unusual convergence of three different weather systems. Those from the west tend to stall in the Appalachian Mountains, moist warm air masses from the Gulf of Mexico move into the area, and coastal systems come in off the Atlantic Ocean. The result, however, is far from unpleasant. In fact, Aiken County has been known for nearly 150 years as a health resort, because of its weather. The average winter temperature of 48° F and the average summer temperature of 79° F confirm the generally mild climate. There are 48 inches of annual precipitation, with over falling in the growing season (Rogers 1985:1). In spite of this, Brooks and Crass suggest an element of uncertainty in the rainfall, with the amount occurring during the prime growing season of such crops as cotton or corn having been marginal. They suggest that this depressed "productivity relative to labor input" and encouraged "a broad spectrum subsistence base" (Brooks and Crass 1991:10).

Lexington and Orangeburg counties have similar climates, although summer temperatures have been known to reach 90° and even 100° a few days a year.

Floristics

Perhaps the most noticeable feature about

the Sandhills, however, is its characteristically xerophytic vegetation. Found where there is an extremely permeable layer of sandy soil that is leached of nutrients, this pattern is maintained by fire. Curiously, the vegetational pattern can quickly change, however, depending on such factors as the presence of clay subsoil and the depth of the water table. Barry remarks, for example:

the complete transition from a xeric turkey oak barren to a hydric bay or pocosin can occur within a remarkably short distance, often with very little ecotone (Barry 1980:100).

While Turkey Oak Barrens and Scrub Oak Barrens occur in the vicinity of the project area, the more dominant vegetation is the Xeric Pine-Mixed Hardwood, evidencing a slightly more mesic condition. However, it should be cautioned that the area has undergone extensive alterations through time, so that the vegetation present today bears little resemblance to the natural vegetation of the region.

It seems likely that this region historically would have been characterized by loblolly pines, perhaps red cedar, and post oak. Hickories would have included primarily the pignut hickory. Understory plants, then as now, would include dogwood, sassafras, blackgum, and persimmon.

The survey corridor runs through a variety of flora including planted pines, mixed pine and hardwood forests, wetlands, pasture, fallow fields, scrub vegetation, and crosses creeks and a river.

PREHISTORIC AND HISTORIC OVERVIEW

Previous Research

Of the three counties through which the corridor runs, Orangeburg has received the least attention. Derting et al. (1991) cite only 27 studies dealing with the county. Of these 13, or nearly half, are the result of road projects and an additional eight represent other forms of cultural resource studies, only three of which represent any significant aerial extent. The remaining six reports involve a variety of other research, with three specifically associated with work at the Alan Mack site (38OR67), probably the best known archaeological site in Orangeburg County.

The Alan Mack site was nominated to the National Register of Historic Places as a result of work conducted in the mid-1980s. The site exhibits nearly 30 inches of stratified deposits running from at least the Early Archaic (characterized at the site by Palmer points). Above this are levels representing Kirk, Guilford, somewhat mixed deposits of Deptford and perhaps later pottery. Unfortunately no publications are available for the site beyond a series of papers presented at the Archaeological Society of South Carolina Annual Conference and occasional reports in the society newsletter.

Of the 85 reports concerning Aiken County listed by Derting et al. (1991), nearly 24% (n=20) are the result of relatively small, or at least constrained, surveys associated with highway projects, while an additional 30 studies (35%) are associated with the on-going archaeological and historical research for the Department of Energy at the Savannah River Plant. Other major "themes" in the archaeological research of Aiken County include work at Fort Moore, Coker Springs, and Silver Bluff. There appears to have been no work undertaken in the immediate area of the proposed project site.

Several previous published archaeological studies are available for the Aiken (and Barnwell) area of South Carolina to provide background, including the synthetic works from the Savannah River Plant. Sassaman et al. (1990) discuss the prehistory of the region, providing a framework of current research and site/settlement models, while Brooks and Crass (1991) provide a somewhat more modest effort for the historic period in the general vicinity. These studies should be consulted for additional information on the archaeological context of the project area.

Lexington County has received considerable attention from such studies as Anderson (1974a, 1974b, 1979), Anderson et al. (1974), Drucker (1977), Goodyear (1975), Harmon (1980), Michie (1970, 1971), Trinkley (1974, 1980), and Wogaman et al. (1976). The vast majority of these studies are associated with surveys of the Twelfth Street extension project or the Southeastern Beltway, although a number of sewer surveys have also been conducted. Others have focused on testing or excavation at sites such as the Manning site and the Thom's Creek site. Michie's work identifying Fort Congaree stands as a major research contribution for the area (Michie 1989). In addition, a number of smaller highway department surveys (many of which are referenced in Derting et al. 1991:309-310, 315, 317-319), transmission line right of way surveys (see, for example, Adams 1994a and 1994b) and small parcel surveys (for example, Adams and Trinkley 1991) have been performed in the area.

Prehistoric Overview

Paleoindian Period

The Paleoindian Period, most commonly dated from about 12,000 to 10,000 B.P., is

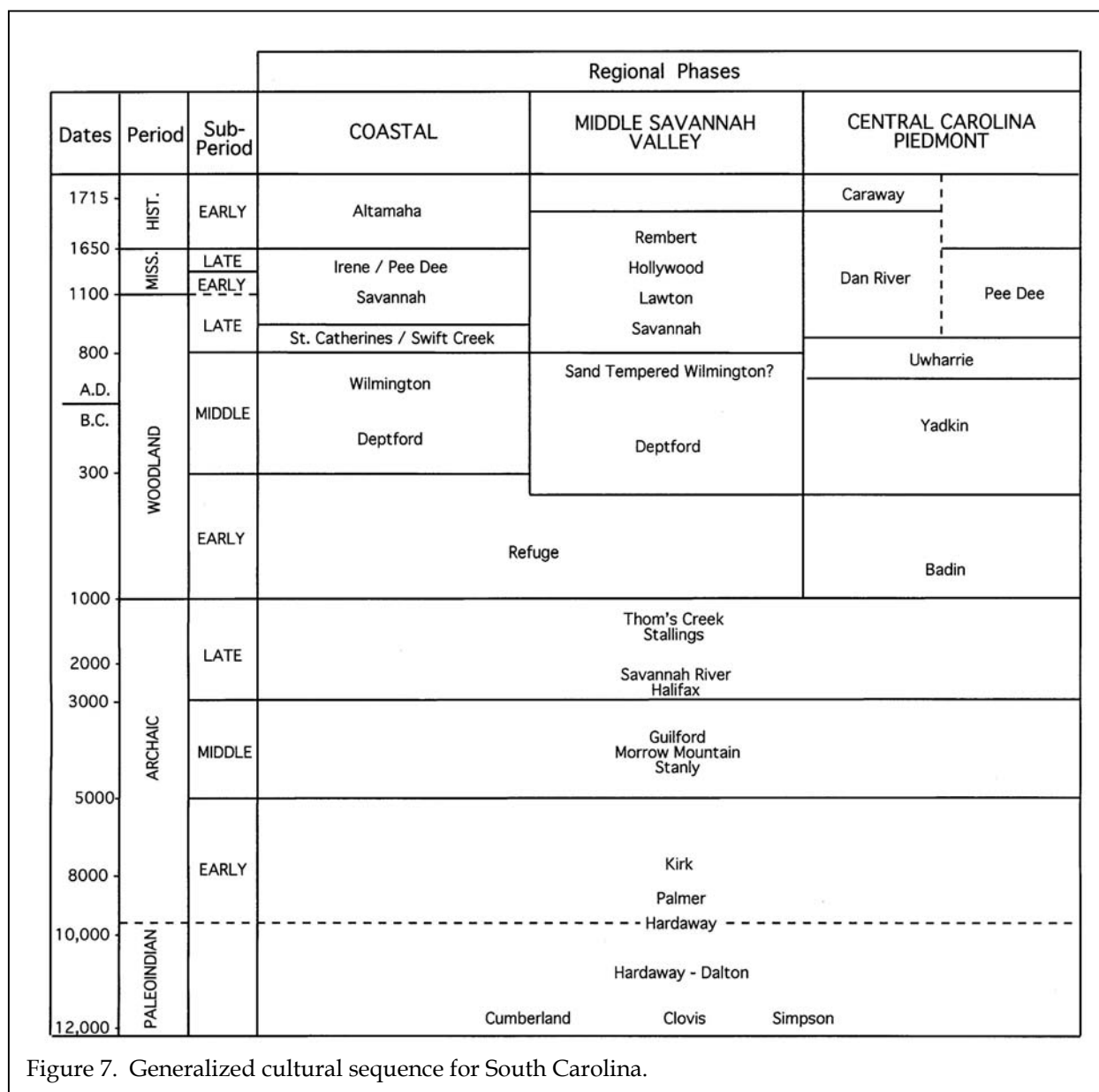


Figure 7. Generalized cultural sequence for South Carolina.

evidenced by basally thinned, side-notch projectile points; fluted, lanceolate projectile points, side scrapers, end scrapers; and drills (Coe 1964; Michie 1977; Williams 1965). Oliver (1981, 1985) has proposed to extend the Paleoindian dating in the North Carolina Piedmont to perhaps as early as 14,000 B.P., incorporating the Hardaway Side-Notched and Palmer Corner-Notched types, usually accepted as Early Archaic, as representatives of the terminal phase. This view, verbally suggested by Coe for a number of years,

has considerable technological appeal.¹ Oliver

¹ While never discussed by Coe at length, he did observe that many of the Hardaway points, especially from the lowest contexts, had facial fluting or thinning which, "in cases where the side-notches or basal portions were missing, . . . could be mistaken for fluted points of the Paleo-Indian period" (Coe 1964:64). While not an especially strong statement, it does reveal the formation of the concept. Further insight is offered by Ward's (1983:63) all too brief comments on the more recent investigations at the Hardaway site (see also

suggests a continuity from the Hardaway Blade through the Hardaway-Dalton to the Hardaway Side-Notched, eventually to the Palmer Side-Notched (Oliver 1985:199-200). While convincingly argued, this approach is not universally accepted.

The Paleoindian occupation, while widespread, does not appear to have been intensive. Artifacts are most frequently found along major river drainages, which Michie interprets to support the concept of an economy "oriented toward the exploitation of now extinct mega-fauna" (Michie 1977:124). Survey data for Paleoindian tools, most notably fluted points, is somewhat dated, but has been summarized by Charles and Michie (1992). They reveal a widespread distribution across the state (see also Anderson 1992b:Figure 5.1) with at least several concentrations relating to intensity of collector activity. What is clear is that points are found fairly far removed from the origin of the raw material. Charles and Michie suggest that this may "imply a geographically extensive settlement system" (Charles and Michie 1992:247).

Although data are sparse, one of the more attractive theories that explains the widespread distribution of Paleoindian sites is the model tracking the replacement of a high technology forager (or HTF) adaptation by a "progressively more generalized band/microband foraging adaption" accompanied by increasingly distinct regional traditions (perhaps reflecting movement either along or perhaps even between river drainages) (Anderson 1992b:46).

Distinctive projectile points include lanceolates such as Clovis, Dalton, perhaps the Hardaway, and Big Sandy (Coe 1964; Phelps 1983; Oliver 1985). A temporal sequence of Paleoindian projectile points was proposed by Williams (1965:24-51), but according to Phelps (1983:18) there is little stratigraphic or chronometric evidence for it. While this is certainly true, a

Daniel 1992).

number of authors, such as Anderson (1992a) and Oliver (1985) have assembled impressive data sets. We are inclined to believe that while often not conclusively proven by stratigraphic excavations (and such proof may be an unreasonable expectation), there is a large body of circumstantial evidence. The weight of this evidence tends to provide considerable support.

Unfortunately, relatively little is known about Paleoindian subsistence strategies, settlement systems, or social organization (see, however, Anderson 1992b for an excellent overview and synthesis of what is known). Generally, archaeologists agree that the Paleoindian groups were at a band level of society, were nomadic, and were both hunters and foragers. While population density, based on isolated finds, is thought to have been low, Walthall suggests that toward the end of the period, "there was an increase in population density and in territoriality and that a number of new resource areas were beginning to be exploited" (Walthall 1980:30).

Archaic Period

The Archaic Period, which dates from 10,000 to 3,000 B.P.², does not form a sharp break

² The terminal point for the Archaic is no clearer than that for the Paleoindian and many researchers suggest a terminal date of 4,000 B.P. rather than 3,000 B.P. There is also the question of whether ceramics, such as the fiber-tempered Stallings ware, will be included as Archaic, or will be included with the Woodland. Oliver, for example, argues that the inclusion of ceramics with Late Archaic attributes "complicates and confuses classification and interpretation needlessly" (Oliver 1981:20). He comments that according to the original definition of the Archaic, it "represents a preceramic horizon" and that "the presence of ceramics provides a convenient marker for separation of the Archaic and Woodland periods (Oliver 1981:21). Others would counter that such an approach ignores cultural continuity and forces an artificial, and perhaps unrealistic, separation. Sassaman and Anderson (1994:38-44), for example, include Stallings and Thom's Creek wares in their discussion of "Late Archaic Pottery." While this issue

with the Paleoindian Period, but is a slow transition characterized by a modern climate and an increase in the diversity of material culture. Associated with this is a reliance on a broad spectrum of small mammals, although the white tailed deer was likely the most commonly exploited animal. Archaic period assemblages, exemplified by corner-notched and broad-stemmed projectile points, are fairly common, perhaps because the swamps and drainages offered especially attractive ecotones.

Many researchers have reported data suggestive of a noticeable population increase from the Paleoindian into the Early Archaic. This has tentatively been associated with a greater emphasis on foraging. Diagnostic Early Archaic artifacts include the Kirk Corner Notched point. As previously discussed, Palmer points may be included with either the Paleoindian or Archaic period, depending on theoretical perspective. As the climate became hotter and drier than the previous Paleoindian period, resulting in vegetational changes, it also affected settlement patterning as evidenced by a long-term Kirk phase midden deposit at the Hardaway site (Coe 1964:60). This is believed to have been the result of a change in subsistence strategies.

Settlements during the Early Archaic suggest the presence of a few very large, and apparently intensively occupied, sites which can best be considered base camps. Hardaway might be one such site. In addition, there were numerous small sites which produce only a few artifacts -- these are the "network of tracks" mentioned by Ward (1983:65). The base camps produce a wide range of artifact types and raw materials which has suggested to many researchers long-term, perhaps seasonal or multi-seasonal, occupation. In contrast, the smaller sites are thought of as special

has been of considerable importance along the Carolina and Georgia coasts, it has never affected the Piedmont, which seems to have embraced pottery far later, well into the conventional Woodland period. The importance of the issue in the Sandhills, unfortunately, is not well known.

purpose or foraging sites (see Ward 1983:67).

Middle Archaic (8,000 to 6,000 B.P.) diagnostic artifacts include Morrow Mountain, Guilford, Stanly and Halifax projectile points. Much of our best information on the Middle Archaic comes from sites investigated west of the Appalachian Mountains, such as the work by Jeff Chapman and his students in the Little Tennessee River Valley (for a general overview see Chapman 1977, 1985a, 1985b). There is good evidence that Middle Archaic lithic technologies changed dramatically. End scrapers, at times associated with Paleoindian traditions, are discontinued, raw materials tend to reflect the greater use of locally available materials, and mortars are initially introduced. Associated with these technological changes there seem to also be some significant cultural modifications. Prepared burials begin to more commonly occur and storage pits are identified. The work at Middle Archaic river valley sites, with their evidence of a diverse floral and faunal subsistence base, seems to stand in stark contrast to Caldwell's Middle Archaic "Old Quartz Industry" of Georgia and the Carolinas, where axes, choppers, and ground and polished stone tools are very rare.

Among the most common of all Middle Woodland artifacts is the Morrow Mountain Stemmed projectile point. Originally divided into two varieties by Coe (1964:37,43) based primarily on the size of the blade and the stem. Morrow Mountain I points had relatively small triangular blades with short, pointed stems. Morrow Mountain II points had longer, narrower blades with long, tapered stems. Coe suggested a temporal sequence from Morrow Mountain I to Morrow Mountain II. While this has been rejected by some archaeologists, who suggest that the differences are entirely related to the life-stage of the point, the debate is far from settled and Coe has considerable support for his scenario.

The Morrow Mountain point is also important in our discussions since it represents a departure from the Carolina Stemmed Tradition. Coe has suggested that the groups responsible for

the Middle Archaic Morrow Mountain (and the later Guilford points) were intrusive ("without any background" in Coe's words) into the North Carolina Piedmont, from the west, and were contemporaneous with the groups producing Stanly points (Coe 1964:122-123; see also Phelps 1983:23). Phelps, building on Coe, refers to the Morrow Mountain and Guilford as the "Western Intrusive horizon." Sassaman (1995) has recently proposed a scenario for the Morrow Mountain groups which would support this west-to-east time-transgressive process. Abbott and his colleagues, perhaps unaware of Sassaman's data, dismiss the concept, commenting that the sheer distribution and number of these points "makes this position wholly untenable" (Abbott et al. 1995:9).

The controversy surrounding Morrow Mountain also includes its posited date range. Coe (1964:123) did not expect the Morrow Mountain to predate 6500 B.P., yet more recent research in Tennessee reveals a date range of about 7500 to 6500 B.P. Sassaman and Anderson (1994:24) observe that the South Carolina dates have never matched the antiquity of their more western counterparts and suggest continuation to perhaps as late as 5500 B.P. In fact they suggest that even later dates are possible since it can often be difficult to separate Morrow Mountain and Guilford points.

A recently defined point is the MALA. The term is an acronym standing for Middle Archaic and Late Archaic, the strata in which these points were first encountered at the Pen Point site (38BR383) in Barnwell County, South Carolina (Sassaman 1985). These stemmed and notched lanceolate points were originally found in a context suggesting a single-episode event with variation not based on temporal variation. The original discussion was explicitly worded to avoid application of a typology, although as Sassaman and Anderson (1994:27) note, the "type" has spread into more common usage. There are possible connections with both the Halifax points of North Carolina and the Benton points of the middle Tennessee River valley, while the

"heartland" for the MALA appears confined to the lower middle Coastal Plain of South Carolina.

The available information has resulted in a variety of competing settlement models. Some argue for increased sedentism and a reduction of mobility (see Goodyear et al. 1979:111). Ward argues that the most appropriate model is one which includes relatively stable and sedentary hunters and gatherers "primarily adapted to the varied and rich resource base offered by the major alluvial valleys" (Ward 1983:69). While he recognizes the presence of "inter-riverine" sites, he discounts explanations which focus on seasonal rounds, suggesting "alternative explanations . . . [including] a wide range of adaptive responses." Most importantly, he notes that:

the seasonal transhumance model and the sedentary model are opposite ends of a continuum, and in all likelihood variations on these two themes probably existed in different regions at different times throughout the Archaic period (Ward 1983:69).

Others suggest increased mobility during the Archaic (see Cable 1982). Sassaman (1983) has suggested that the Morrow Mountain phase people had a great deal of residential mobility, based on the variety of environmental zones they are found in and the lack of site diversity. The high level of mobility, coupled with the rapid replacement of these points, may help explain the seemingly large numbers of sites with Middle Archaic assemblages. Curiously, the later Guilford phase sites are not as widely distributed, perhaps suggesting that only certain micro-environments were used (cf. Ward [1983:68-69] who would likely reject the notion that substantially different environmental zones are, in fact, represented).

Recently Abbott et al. argue for a combination of these models, noting that the almost certain increase in population levels

probably resulted in a contraction of local territories. With small territories there would have been significantly greater pressure to successfully exploit the limited resources by more frequent movement of camps. They discount the idea that these territories could have been exploited from a single base camp without horticultural technology. Abbott and his colleagues conclude, "increased residential mobility under such conditions may in fact represent a common stage in the development of sedentism" (Abbott et al. 1995:9).

From excavations at a Sandhills site in Chesterfield County, South Carolina, Gunn and his colleague (Gunn and Wilson 1993) offer an alternative model for Middle Archaic settlement. He accepts that the uplands were desiccated from global warming, but rather than limiting occupation, this environmental change made the area more attractive for residential base camps. Gunn and Wilson suggest that the open, or fringe, habitat of the upland margins would have been attractive to a wide variety of plant and animal species.

The Late Archaic, usually dated from 6,000 to 3,000 or 4,000 B.P., is characterized by the appearance of large, square stemmed Savannah River projectile points (Coe 1964). These people continued to intensively exploit the uplands much like earlier Archaic groups with, the bulk of our data for this period coming from the Uwharrie region in North Carolina.

One of the more debated issues of the Late Archaic is the typology of the Savannah River Stemmed and its various diminutive forms. Oliver, refining Coe's (1964) original Savannah River Stemmed type and a small variant from Gaston (South 1959:153-157), developed a complete sequence of stemmed points that decrease uniformly in size through time (Oliver 1981, 1985). Specifically, he sees the progression from Savannah River Stemmed to Small Savannah River Stemmed to Gypsy Stemmed to Swannanoa from about 5000 B.P. to about 1,500 B.P. He also notes that the latter two forms are associated with

Woodland pottery.

This reconstruction is still debated with a number of archaeologists expressing concern with what they see as typological overlap and ambiguity. They point to a dearth of radiocarbon dates and good excavation contexts at the same time they express concern with the application of this typology outside the North Carolina Piedmont (see, for a synopsis, Sassaman and Anderson 1990:158-162, 1994:35).

In addition to the presence of Savannah River points, the Late Archaic also witnessed the introduction of steatite vessels (see Coe 1964:112-113; Sassaman 1993), polished and pecked stone artifacts, and grinding stones. Some also include the introduction of fiber-tempered pottery about 4000 B.P. in the Late Archaic (for a discussion see Sassaman and Anderson 1994:38-44). This innovation is of special importance along the Georgia and South Carolina coasts, but seems to have had only minimal impact in the uplands of South or North Carolina.

There is evidence that during the Late Archaic the climate began to approximate modern climatic conditions. Rainfall increased resulting in a more lush vegetation pattern. The pollen record indicates an increase in pine, which reduced the oak-hickory nut masts, which previously were so widespread. This change probably affected settlement patterning since nut masts were now more isolated and concentrated. From research in the Savannah River valley near Aiken, South Carolina, Sassaman has found considerable diversity in Late Archaic site types with sites occurring in virtually every upland environmental zone. He suggests that this more complex settlement pattern evolved from an increasingly complex socio-economic system. While it is unlikely that this model can be simply transferred to the Sandhills of South Carolina without an extensive review of site data and micro-environmental data, it does demonstrate one approach to understanding the transition from Archaic to Woodland.

Woodland Period

As previously discussed, there are those who see the Woodland beginning with the introduction of pottery. Under this scenario the Early Woodland may begin as early as 4,500 B.P. and continued to about 2,300 B.P. Diagnostics would include the small variety of the Late Archaic Savannah River Stemmed point (Oliver 1985) and pottery of the Stallings and Thoms Creek series. These sand tempered Thoms Creek wares are decorated using punctations, jab-and-drag, and incised designs (Trinkley 1976). Also potentially included are Refuge wares, also characterized by sandy paste, but often having only a plain or dentate-stamped surface (Waring 1968). Others would have the Woodland beginning about 3,000 B.P. and perhaps as late as 2,500 B.P. with the introduction of pottery which is cord-marked or fabric-impressed and suggestive of influences from northern cultures.

There remains, in South Carolina, considerable ambiguity regarding the pottery series found in the Sandhills and their association with coastal plain and piedmont types. The earliest pottery found at many sites may be called either Deptford or Yadkin, depending on the research or their inclination at any given moment.

The Deptford phase, which dates from 3050 to 1350 B.P., is best characterized by fine to coarse sandy paste pottery with a check stamped surface treatment. The Deptford settlement pattern involves both coastal and inland sites.

Inland sites such as 38AK228-W, 38LX5, 38RD60, and 38BM40 indicate the presence of an extensive Deptford occupation on the Fall Line and the Inner Coastal Plain/Sand Hills, although sandy, acidic soils preclude statements on the subsistence base (Anderson 1979; Ryan 1972; Trinkley 1980). These interior or upland Deptford sites, however, are strongly associated with the swamp terrace edge, and this environment is productive not only in nut masts, but also in large mammals such as deer. Perhaps the best data concerning Deptford "base camps" comes from the

Lewis-West site (38AK228-W), where evidence of abundant food remains, storage pit features, elaborate material culture, mortuary behavior, and craft specialization has been reported (Sassaman et al. 1990:96-98; see also Sassaman 1993 for similar data recovered from 38AK157).

Further to the north and west, in the Piedmont, the Early Woodland is marked by a pottery type defined by Coe (1964:27-29) as Badin.³ This pottery is identified as having very fine sand in the paste with an occasional pebble. Coe identified cord-marked, fabric-marked, net-impressed, and plain surface finishes. Beyond this pottery little is known about the makers of the Badin wares and relatively few of these sherds are reported from South Carolina sites.

Somewhat more information is available for the Middle Woodland, typically given the range of about 2,300 B.P. to 1,200 B.P. In the Piedmont and even into the Sand Hills, the dominant Middle Woodland ceramic type is typically identified as the Yadkin series. Characterized by a crushed quartz temper the pottery includes surface treatments of cord-marked, fabric-marked, and a very few linear check-stamped sherds (Coe 1964:30-32). It is regrettable that several of the seemingly "best" Yadkin sites, such as the Trestle site (31An19) explored by Peter Cooper (Ward 1983:72-73), have never been published.

Yadkin ceramics are associated with medium-sized triangular points, although Oliver (1981) suggests that a continuation of the Piedmont Stemmed Tradition to at least 1650 B.P. coexisted with this Triangular Tradition. The Yadkin in South Carolina has been best explored by research at 38SU83 in Sumter County (Blanton et al. 1986) and at 38FL249 in Florence County

³ The ceramics suggest clear regional differences during the Woodland which seem to only be magnified during the later phases. Ward (1983:71), for example, notes that there "marked distinctions" between the pottery from the Buggs Island and Gaston Reservoirs and that from the south-central Piedmont.

(Trinkley et al. 1993)

In some respects the Late Woodland (1,200 B.P. to 400 B.P.) may be characterized as a continuation of previous Middle Woodland cultural assemblages. While outside the Carolinas there were major cultural changes, such as the continued development and elaboration of agriculture, the Carolina groups settled into a lifeway not appreciably different from that observed for the previous 500-700 years. From the vantage point of the Middle Savannah Valley Sassaman and his colleagues note that, "the Late Woodland is difficult to delineate typologically from its antecedent or from the subsequent Mississippian period" (Sassaman et al. 1990:14). This situation would remain unchanged until the development of the South Appalachian Mississippian complex (see Ferguson 1971).

Historic Overview

The survey corridor (presently in Aiken, Orangeburg, and Lexington Counties) was in what are historically known as the Orangeburg and Lexington Districts.

In the Orangeburg District, the earliest settlement appears to have begun with the 1704 grant to Robert Sterling of 570 acres on Lyons Creek – in what is today Calhoun County. Situated about 4 miles south of St. Matthews on the Charleston Road, this seems to have served as a focus for additional settlement, largely by English and French Huguenots, who came to the area between 1735 and 1737 (DeFrancesco 1988:1; Mills 1972 [1826]:656-657).

The Orangeburg Township was located on the east bank of the North Fork of the Edisto River, bordering the Amelia Township to the north. The middle and upper sections, notably along the rivers, provided excellent agricultural land and this settlement attracted a variety of German and Swiss settlers. By 1740 the population had reached 500 (Meriwether 1940:45-46).

Originally part of Orangeburg District, the

1785 act divided the district into Lewisburg (along the river), Orange, Lexington (to the north), and Winton (an early version of Barnwell along the Savannah). These counties, however, were abolished in 1791 and the Orangeburg District was reinstituted. By 1804, however, the district was again subdivided, this time into Lexington (1804), Orangeburg, and Barnwell (1800). Consequently, by the time Mills discussed the region in 1820, Orangeburg was an elongated district and Mills observed that, "its figure is very irregular, having a kind of peninsula, or long narrow strip, running between two rivers, upwards of twenty-six miles from the main body of the district" (Mills 1972 [1826]:657).

Lexington County was first occupied by Europeans who built a fortified military garrison (Fort Congaree) in 1718 on the site of a former Congaree Indian village. A second fortification was established 22 miles north after attacks by Iroquois from the Ohio Valley upon settlers in the late 1740s. These two forts were significant in the defense of the Carolina Back Country (Central Midlands Regional Planning Council 1974:132).

The first large trading post in central South Carolina was built near the old Congaree fort site in 1733, east of the current project corridor. This post was an exchange center between Charles Town and the western settlements. During this year the area received political identity as Congaree District. Two years later it was renamed Saxe Gotha in an attempt to bring immigrants from Germany and Switzerland to the piedmont. Most of these early settlers were small farmers while the more prosperous ones operated stores, trading posts, saw and grist mills.

During the Colonial period Orangeburg was at best a small village, containing several taverns and stores, a courthouse, a jail, both a Lutheran and an Anglican church, and a few small residences (Edgar 1998:163). The jail, built in 1770, was the one which General Sumter:

besieged and took, during the revolutionary war. The British

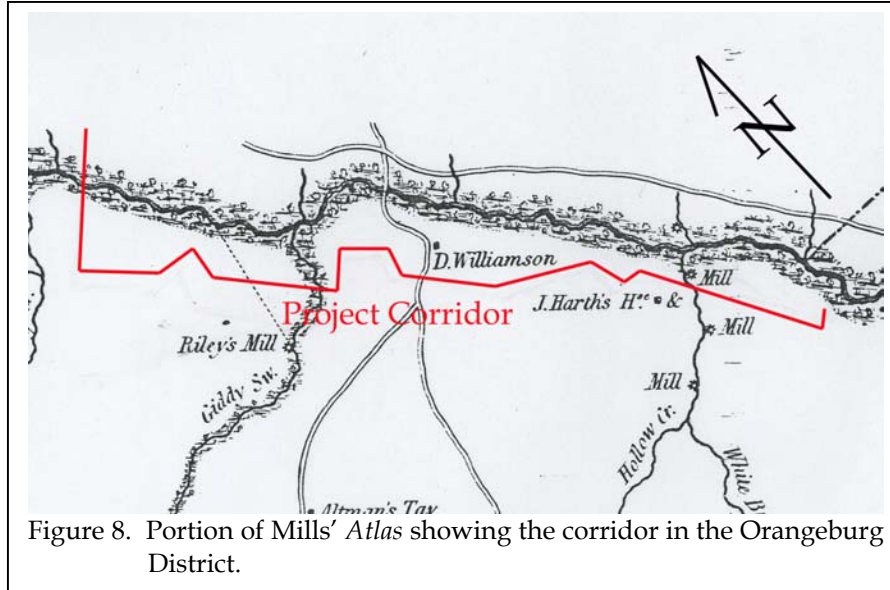


Figure 8. Portion of Mills' Atlas showing the corridor in the Orangeburg District.

had a garrison there consisting of 70 militia and 12 regulars. This village was for some time the seat of war. After Lord Rawdon had retreated from Camden, he took up his quarters here, whither he was pursued by Gen. Green, who offering him battle; but his lordship, secure in his strong hold, would not venture out; and Gen. Green was too weak to attack him in his works, with any prospect of success (Mills 1972 [1826]:662-663).

It was also during this same campaign that General Green and his partisans attacked and took over Fort Motte (in what is today Calhoun County) (Edgar 1998:237).

In 1785, Lexington County was established in the Orangeburg District.

By the second quarter of the nineteenth century there were only three settlements in Orangeburg. The village of Orangeburg was "not favorably situated for health" according to Mills, although it was "tolerably central to the district." The second was the village of Poplar Spring, about 4.5 miles west of Orangeburg and used

primarily as a summer residence. The third settlement was the village of Totness, on the north side of High Hill Creek, about 3 miles from the Congaree River. It, too, was primarily a summer village for the planters, which Mills described as "pleasant . . . and much frequented" (Mills 1972 [1826]:663).

Between 1800 and 1820 the population of the Orangeburg District had increased by over a third, from 10,155 to 15,653. But the proportion of white increase was modest, from 5,957 in 1800 to 6,760 in 1820. The African American slave population, however, had more than doubled, from 4,110 to 8,829. This clearly documents the rise of plantations in the region, primarily along the rivers where the best lands were situated. Although Mills comments that there was a lively timber export trade from the district and that the German settlers "made a decent living" from growing corn, "cotton engrosses most attention" (Mills 1972 [1826]:660). It was certainly cotton that supported the increase in African American bondage in the region.

Mills' map of the Orangeburg District (Figure 8) reveals that the proposed corridor, which parallels the North Fork Edisto River, runs near several mills, including Riley's Mill along Giddy Swamp and two unnamed mills on Hollow Creek. The corridor is also located near two settlements - D. Williamson and J. Harth. No evidence of these structures were encountered during the study. Once the corridor crosses the North Fork Edisto River into Lexington District (Figure 9), no settlements or mills are near the project area.

By 1850 the population had increased to 18,519, with 15,384 (83%) of these being African

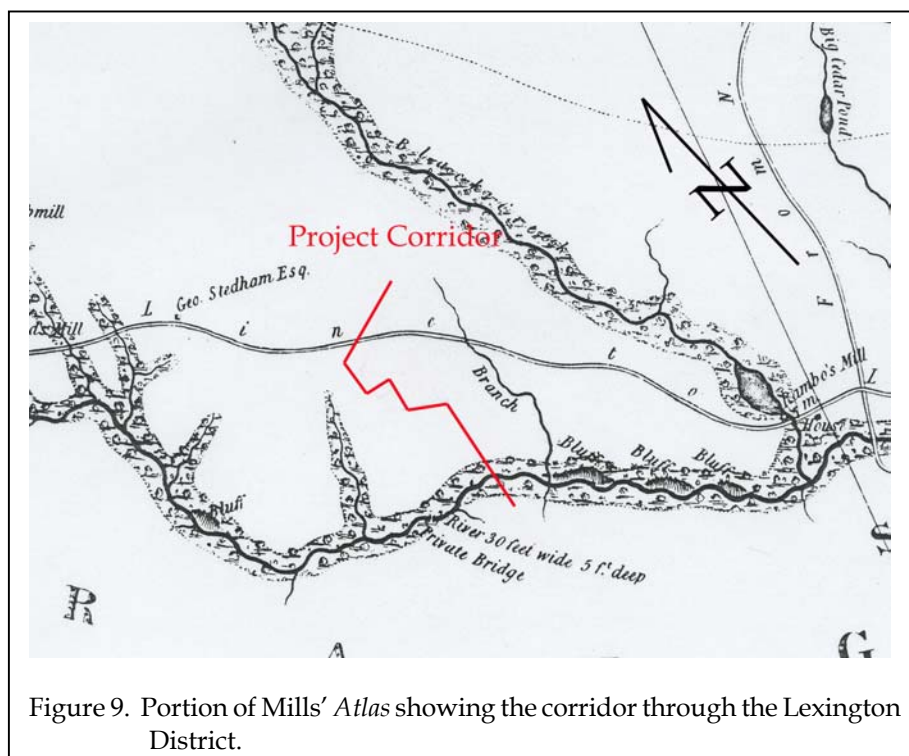


Figure 9. Portion of Mills' Atlas showing the corridor through the Lexington District.

American slaves. Orangeburg had 1,206 farms, with an average of 150 improved acres. The district produced 614,418 bushels of Indian corn, ranking it 13th (out of 29). Also produced were 1,299,379 pounds of rice, ranking Orangeburg fifth in the state, behind fourth ranked Charleston with 16,906,273 pounds, but ahead of sixth ranked Anderson District (with 956,940 pounds). In spite of the slave population, Orangeburg District produced only 10,024 bales of cotton, ranking it thirteenth (DeBow 1854). Lawrence observed that while wheat was grown, it was affected by rust in the late antebellum and stopped being produced until rust-resistant varieties were introduced after the Civil War. He, too, reports that the region's attention was focused on cotton, which remained the area's primary crop until the mid-twentieth century when its prominence was shattered by soybeans (Lawrence 1963:128).

In 1860, Lexington County contained 73 saw mills, one cotton and wool mill, eight carriage and wagon makers, one sash and blind factory, two boot and show makers, one tannery, one blacksmith, one turpentine distillery, one printing

establishment, and one wooden bucket factory.

Orangeburg saw little impact from the Civil War until the end, when Sherman's troops came up the north side of the Edisto, followed the North Fork into the city of Orangeburg, which was burned, and then continued north into what is today Calhoun County, crossing over the Santee River (Glatthaar 1985). In Lexington County, the Civil War Union forces shelled the city of Columbia from the west bank of the Congaree, but did not appear to cross the center of the County.

After the Civil War, with slaves no longer providing easy labor for the cotton plantations, the economy was stagnant and a slow period of rebuilding began. The remaining decades of the nineteenth century were focused on the dual goals of restoring the economy and ensuring that African Americans remained in a state as closely as possible resembling bondage.

The hiring of freedmen began immediately after the war, with variable results. The Freedmen's Bureau attempted to establish a system of wage labor, but the effort was largely tempered by the enactment of the Black Codes by the South Carolina Legislature in September 1865. These Codes allowed nominal freedom, while establishing a new kind of slavery, severely restricting the rights and freedoms of the black majority. Added to the Codes were oppressive contracts, which reinforced the power of the plantation owner and degraded the freedom of the Blacks. Many white planters formed "Democratic Clubs," designed to counter the "radical" influence. Members of these clubs resolved not to

hire "radicals," or blacks associated with radical politics.

While cash labor was initially used, gradually owners turned away from wage labor contracts, at least partially because of the scarcity of money, but also because of the prevailing belief among whites that blacks were so lazy that with money in their pockets they would not work. In its place two kinds of tenancy -- sharecropping and renting -- developed. While very different, both succeeded in making land ownership very difficult, if not impossible, for the vast majority of Blacks.

Sharecropping required the tenant to pay his landlord part of the crop produced, while renting required that he pay a fixed rent in either crops or money. In sharecropping the tenant supplied the labor and one-half of the fertilizer, the landlord supplied everything else -- land, house, tools, work animals, animal feed, wood for fuel, and the other half of the needed fertilizer. In return, the landlord received half of the crop at harvest. This system became known as "working on halves," and the tenants as "half hands," or "half tenants."

In share-renting, the landlord supplied the land, housing, and either one-quarter or one-third of the fertilizer costs. The tenant supplied the labor, animals, animal feed, tools, seed, and the remainder of the fertilizer. At harvest the crop was divided in proportion to the amount of fertilizer that each party supplied. A number of variations on this occurred, one of the most common being "third and fourth," where the landlord received one-fourth of the cotton crop and one-third of all other crops. In cash-renting

the landlord provided the land and housing, with the renter providing everything else and paying a fixed per-acre rent in cash.

Aiken County was created in 1871 when parts of Edgefield, Lexington, Barnwell, and Orangeburg counties were joined.

In the 1880s, Aiken County had three mills (Graniteville, Vaucluse, and Langley). Cotton was being produced in large amounts and it was estimated that the average cost of producing merchantable cotton was about eight cents a pound and 40 dollars to bale 500 pounds. It

Table 1
Systems of Tenure

	Share-Cropping	Share Renting	Cash Renting
Landlord furnishes:	land housing fuel tools work stock seed half of fertilizer feed for stock	land housing fuel 1/2 or 1/3 fertilizer	land housing fuel
Tenant furnishes:	labor half of fertilizer	labor work stock feed for stock tools seed 3/4 or 2/3 fertilizer	labor work stock feed for stock tools seed fertilizer
Landlord receives:	1/2 of crop	1/4 or 1/3 of crop	fixed amount in cash or lint cotton
Tenant receives:	1/2 of crop	3/4 or 2/3 of crop	entire crop less fixed amount

appears that a large portion of the manufacturing in the county was milling grain or producing lumber and turpentine. Of the 31 other manufacturing establishments there were 12 grist mills, 12 lumber mills, 6 turpentine establishments, and one paper mill (Anonymous 1884). There was, in addition, one granite quarry, associated with Graniteville Manufacturing Company.

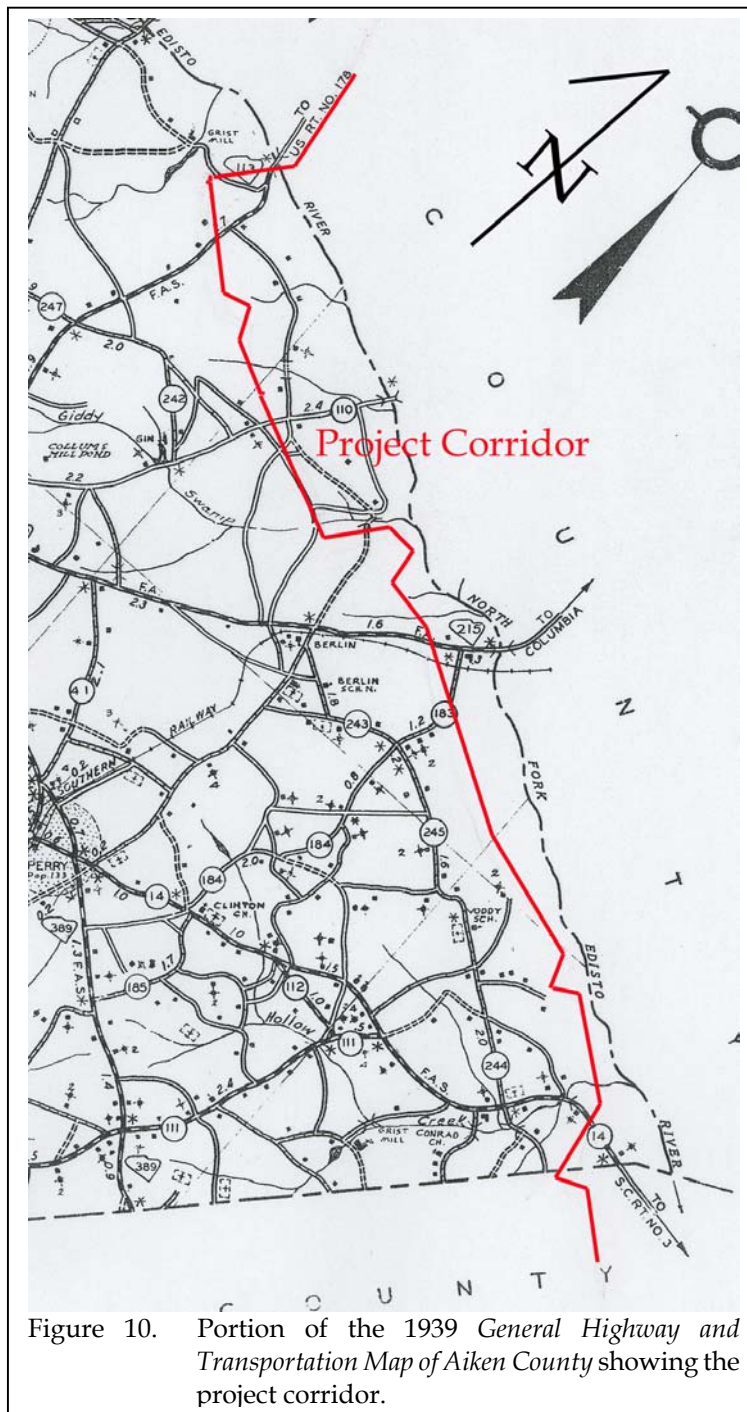


Figure 10. Portion of the 1939 General Highway and Transportation Map of Aiken County showing the project corridor.

An 1884 account of the Orangeburg County revealed that while there was only one textile mill (in the town of Orangeburg), there were 112 grist mills scattered across the countryside, along with 31 flour mills. All were

using water power. As a vestige of the area's rice cultivation there was also one rice mill. Cash wages, when paid, were \$4 to \$6 a month, with rations, a house, and a small garden spot. The county had 322 cotton gins, each turning out about 4 bales a day. One of the most interesting observations was that South Carolina prohibition law was not observed and not enforced -- apparently liquor flowed freely in Orangeburg (Anonymous 1884).

By 1900 the population of Orangeburg County was 59,663, with African Americans still dominating the population (41,442 or nearly 70%). By this time tenancy had become firmly established -- there were 8,408 farms in the county, with an average size of just under 80 acres. Nearly 55% of the farms (n=4,613) were operated by cash tenants.

Nevertheless, Orangeburg recovered with a vengeance. By 1900 the county produced 1,172,520 bushels of corn, ranking it first in corn production. It's nearest competitor was Sumter with 762,120 bushels. Orangeburg also ranked first in cotton, producing 65,433 bales or 0.55 bale per acre (again its closest competitor was Sumter County, which produced 48,485 bales or 0.52 bale per acre). While a certain amount of Orangeburg's success was related to its size, it seems clear that the farms were generally profitably operated.

Cotton also continued to be the major crop in Aiken County. In 1900, Aiken reported 63,127 acres devoted to cotton (representing nearly a third of the county's improved farm acreage) with a yield of 28,223 bales, placing it 11th in the state. The only crop with more acreage was corn, planted on 75,966 acres. Corn production yielded 703,080 bushels. Only Orangeburg, Sumter, and Barnwell produced more corn than Aiken.

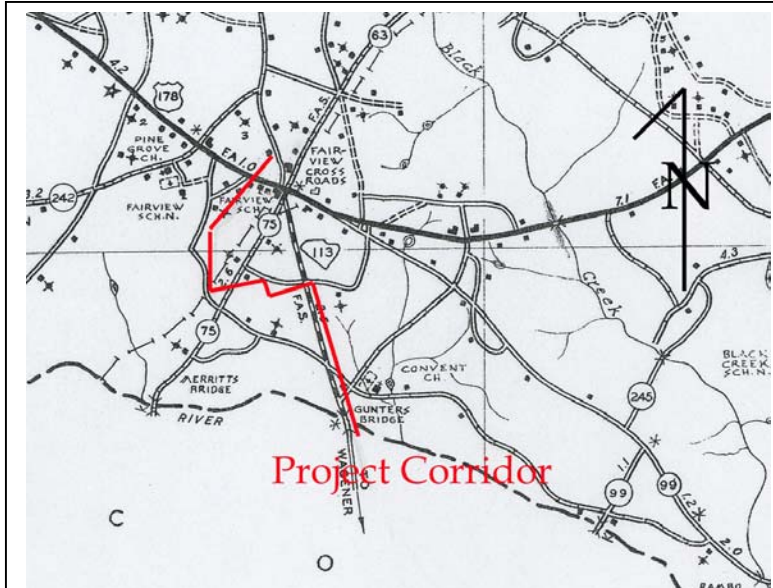


Figure 11. Portion of the 1940 *General Highway and Transportation Map of Lexington County* showing the project corridor.

By 1920 there were 8,558 farms in Orangeburg County, most of which ($n=4,037$ or 47%) were between 20 and 49 acres in size. Two-thirds of those farms were operated by African Americans. Of the 8,558 farms, 5,644 (66%) were operated by tenants and 37% of these were share tenants, with an additional 25% being croppers. Orangeburg County was dominated by an agriculture focused solely on cotton and designed to maximize profits to owners while minimizing any hope for small farmers -- black or white -- to ever own land.

The 1920s, however, were the beginning of the end for cotton. Cotton and tobacco prices both collapsed in 1920. This was followed by both droughts and the boll weevil. Edgar observes that in 1930, "after nearly a decade of difficulties, South Carolina agriculture was about to go under. Farmland and buildings had lost more than one-half of their value. One third of the state's farms were mortgaged, and 70 percent of the state's farmers survived on

borrowed money" (Edgar 1998:485).

In 1930 over 68% of all farms were operated by tenants. Only a third of these were operated by cash tenants, with the bulk operated by other forms, primarily sharecropping. The mortgage problem was worse in Orangeburg than statewide -- fully two-fifths of the farms were mortgaged, with the average mortgage representing more than 40% of the farm's value.

Cotton production continued to fall, with only a brief upswing during the 1940s as a result of the war effort. While Orangeburg is still part of South Carolina's "cotton belt," production has declined by over 60% since 1949 and today less than 4% of

the county's harvested land is devoted to cotton. Of far greater importance are soybeans, corn, wheat and specialty crops, such as cucumbers, watermelons, and cantaloupes (DeFrancesco 1988:2).

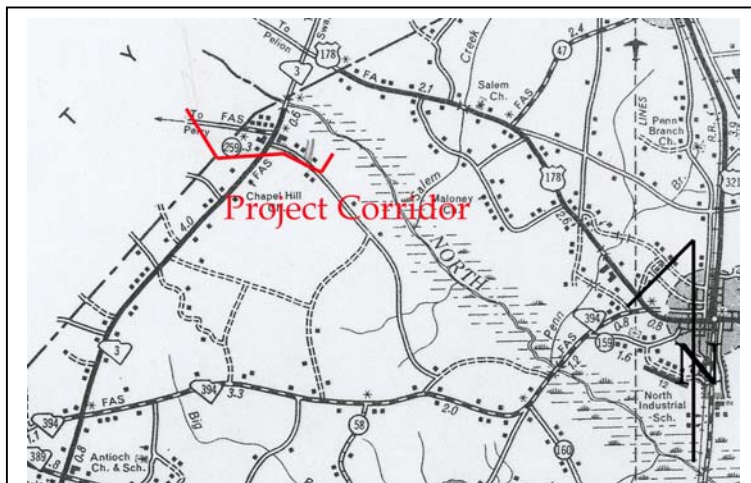


Figure 12. Portion of the 1951 *General Highway and Transportation Map of Orangeburg County* showing the project corridor.

The 1939 *General Highway and Transportation Map of Aiken County* (Figure 10) shows the majority of the corridor, however no

structures were encountered in the project area.

The 1940 *General Highway and Transportation Map of Lexington County* (Figure 11) reveals several structures at the north end of the corridor, including Fairview School. None of these structures were encountered during the field survey and appear to be well east of the corridor.

The 1951 *General Highway and Transportation Map of Orangeburg County* (Figure 12) shows only a small portion of the line – the previous Orangeburg District became Aiken County. No historic structures are found along the corridor.

RESEARCH METHODS AND FINDINGS

Archaeological Field Methods and Findings

The initially proposed field techniques involved the placement of shovel tests at 100-foot intervals along the center line of the corridor, which had been surveyed and was marked with wooden stakes.

All soil would be screened through ¼-inch mesh, with each test numbered sequentially. Each test would measure about 1 foot square and would normally be taken to a depth of at least 1.0 foot or until subsoil was encountered. All cultural

remains would be collected, except for mortar and brick, which would be quantitatively noted in the field and discarded. Notes would be maintained for profiles at any sites encountered.

Should sites (defined by the presence of three or more artifacts from either surface survey or shovel tests within a 50 feet area) be identified, further tests would be used to obtain data on site boundaries, artifact quantity and diversity, site integrity, and temporal affiliation. These tests would be placed at 25 to 50 feet intervals in a simple cruciform pattern until two consecutive negative shovel tests were encountered. The information required for completion of South Carolina Institute of Archaeology and Anthropology site forms would be collected and photographs would be taken, if warranted in the opinion of the field investigators.

A total of 875 shovel tests were excavated within the project corridor.

Analysis of collections would follow professionally accepted standards with a level of intensity suitable to the quantity and quality of the remains.

Nevertheless, the archaeological survey of the corridor failed to identify any remains. This is likely due to the lack of any distinct ridge top, distance from a permanent water source, and steep, excessively drained soils.

Architectural Survey

As previously discussed, we elected to use a 0.5 mile area of potential effect (APE). The architectural survey would record buildings, sites, structures, and objects that appeared to have been constructed before 1950. Typical of such projects, this survey recorded only those which have



Figure 13. View of the Pooles Mill tap line in Orangeburg County.

retained “some measure of its historic integrity” (Vivian n.d.:5) and which were visible from public roads.

For each identified resource we would complete a Statewide Survey Site Form and at least two representative photographs were taken. Permanent control numbers would be assigned by the Survey Staff of the S.C. Department of Archives and History at the conclusion of the study. The Site Forms for the resources identified during this study would be submitted to the S.C. Department of Archives and History.

Site Evaluation and Findings

Archaeological sites will be evaluated for further work based on the eligibility criteria for the National Register of Historic Places. Chicora Foundation only provides an opinion of National Register eligibility and the final determination is made by the lead federal agency, in consultation with the State Historic Preservation Officer at the South Carolina Department of Archives and History.

The criteria for eligibility to the National Register of Historic Places is described by 36CFR60.4, which states:

the quality of significance in American history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

a. that are associated with events that have made a significant contribution to the broad patterns of our history; or

b. that are associated with the lives of persons significant in

our past; or

c. that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

d. that have yielded, or may be likely to yield, information important in prehistory or history.

National Register Bulletin 36 (Townsend et al. 1993) provides an evaluative process that contains five steps for forming a clearly defined explicit rationale for either the site’s eligibility or lack of eligibility. Briefly, these steps are:

- identification of the site’s data sets or categories of archaeological information such as ceramics, lithics, subsistence remains, architectural remains, or sub-surface features;

- identification of the historic context applicable to the site, providing a framework for the evaluative process;

- identification of the important research questions the site might be able to address, given the data sets and the context;

- evaluation of the site’s archaeological integrity to ensure that the data sets were sufficiently well preserved to address the research questions; and



Figure 14. View of 408-0768.

- identification of important research questions among all of those which might be asked and answered at the site.

This approach, of course, has been developed for use documenting eligibility of sites being actually nominated to the National Register of Historic Places where the evaluative process must stand alone, with relatively little reference to other documentation and where typically only one site is being considered. As a result, some aspects of the evaluative process have been summarized, but we have tried to focus on an archaeological site's ability to address significant research topics within the

context of its available data sets.

The previously identified structures (408-0768-0770, 533-1020-1021, and Convent Baptist Church) were revisited and reevaluated due to the proximity to the transmission corridor. Site 408-0768 is a c. 1935 house (Figure 14); 408-0769 is the c. 1935 Bodie School (Figure 15); 408-0770 is the c. 1900 Lucas Cemetery (Figure 16); 533-1018 is a c. 1915 house (Figure 17); 533-1020 is a c.

1915 house; and 533-1021 is a c. 1930 house. All of these Aiken County sites and the Lexington County Convent Baptist Church (Figure 18) were recommended not eligible for the National Register.



Figure 15. View of 408-0769 (Bodie School).



Figure 16. View of 408-0770 (Lucas Cemetery).

However, none of the sites can be seen from the corridor and should not be directly affected, except for the possible short-term increase of traffic due to construction of the transmission line. These sites are still recommended not eligible for the National Register of Historic Places.

No additional structures in the three counties were identified that were in the APE that contain enough integrity to be eligible for the National Register of Historic Places.



Figure 17. View of 533-1018.



Figure 18. View of Convent Baptist Church and Cemetery.

CONCLUSIONS

This study involved the examination of approximately 17 miles of land for a transmission line along the North Fork Edisto River in Lexington, Aiken, and Orangeburg Counties. This work, conducted for Mr. Tommy L. Jackson of Central Electric Power Cooperative examined archaeological sites and cultural resources found on the proposed project corridor and is intended to assist Central Electric Power Cooperative in complying with their historic preservation responsibilities.

As a result of this investigation no sites were identified. This is likely the result of the lack of a distinct ridge tops, distance from a permanent water source, and steep, excessively drained soils.

A survey of public roads within 0.5 mile revealed no structures that retain their integrity for the National Register of Historic Places. Previously identified sites were revisited, but cannot be seen from the project corridor and should not be visually impacted by the transmission line.

It is possible that archaeological remains may be encountered during construction activities. As always, contractors should be advised to report any discoveries of concentrations of artifacts (such as bottles, ceramics, or projectile points) or brick rubble to the project engineer, who should in turn report the material to the State Historic Preservation Office, or Chicora Foundation (the process of dealing with late discoveries is discussed in 36CFR800.13(b)(3)). No further land altering activities should take place in the vicinity of these discoveries until they have been examined by an archaeologist and, if necessary, have been processed according to 36CFR800.13(b)(3).

SOURCES CITED

Abbott, Lawrence E., Jr., John S. Cable, Mary Beth Reed, and Erica E. Sanborn

- 1995 *An Archaeological Survey and Testing of the McLean-Thompson Property Land Acquisition, and the Ambulatory Health Care Clinic Project, Fort Bragg, Cumberland County, North Carolina*. Technical Report 349. New South Associates, Stone Mountain, Georgia.

Adams, Natalie

- 1994a *Archaeological Survey of a Portion of the Sandy Run-Lyles Transmission Line, Lexington County, South Carolina*. Research Contribution 156. Chicora Foundation, Inc., Columbia.
- 1994b *Archaeological Survey of the Silver Lake-Lyles Transmission Line, Calhoun, Lexington, and Richland Counties, South Carolina*. Research Contribution 132. Chicora Foundation, Inc., Columbia.

Adams, Natalie and Michael Trinkley

- 1991 *Archaeological Reconnaissance of the Proposed United States Postal Facility Tract, Lexington County, South Carolina*. Research Contribution 67. Chicora Foundation, Inc., Columbia.

Anderson, David G.

- 1974a *An Archaeological Survey of the Proposed Alternate Two Route of the Columbia Southeastern Beltway, Richland-Lexington Counties, South Carolina*. Ms. On file, South Carolina Institute of Archaeology and Anthropology.

- 1974b 38LX69 *Testing Operations: Results*. South Carolina Institute of Archaeology.

- 1979 *Excavations at Four Fall Line Sites: The Southeastern Beltway Project*. Commonwealth Associates, Inc., Jacksonville, Michigan. Submitted to the South Carolina Department of Highways and Public Transportation, Columbia.

- 1992a A History of Paleoindian and Early Archaic Research in the South Carolina Area. In *Paleoindian and Early Archaic Period Research in the Lower Southeast: A South Carolina Perspective*, edited by David G. Anderson, Kenneth E. Sassaman, and Christopher Judge, pp. 7-18. Council of South Carolina Professional Archaeologists, Columbia.

- 1992b Models of Paleoindian and Early Archaic Settlement in the Lower Southeast. In *Paleoindian and Early Archaic Period Research in the Lower Southeast: A South Carolina Perspective*, edited by David G. Anderson, Kenneth E. Sassaman, and Christopher Judge, pp. 28-47. Council of South Carolina Professional Archaeologists, Columbia.

- 1994 *The Savannah River Chiefdoms: Political Change in the Late Prehistoric Southeast*. University of Alabama Press, Tuscaloosa.

- Anderson, David G., Charles E. Cantley, and A. Lee Novick
 1982 *The Mattassee Lake Sites: Archaeological Investigations Along the Lower Santee River in the Coastal Plain of South Carolina.* Commonwealth Associates, Jackson, Michigan.
- Anderson, David G., James L. Michie, and Michael Trinkley
 1974 *Archaeological Survey of the Proposed Southwestern Beltway Extension and Twelfth Street Extension Highway Route in the Vicinity of Congaree Creek.* Research Manuscript Series 60. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- Anonymous
 1884 *South Carolina in 1884: A View of the Industrial Life of the State.* The News and Courier, Charleston, South Carolina.
- Barry, John M.
 1980 *Natural Vegetation of South Carolina.* University of South Carolina Press, Columbia.
- Blanton, Dennis B., Christopher T. Espenshade, and Paul E. Brockington, Jr.
 1986 *An Archaeological Study of 38SU83: A Yadkin Phase Site in the Upper Coastal Plain of South Carolina.* Garrow and Associates, Inc., Atlanta.
- Brooks, Richard and David Crass
 1991 *A Desperate Poor Country: History and Settlement Patterning on the Savannah River Site, Aiken and Barnwell Counties, South Carolina.* South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- Cable, John S.
 1982 Differences in Lithic Assemblages of Forager and Collector Strategies. In *Archaeological Survey and Reconnaissance Within the Ten-Year Floodpool Harry S. Truman Dam and Reservoir*, edited by Richard Taylor. Report submitted to the U.S. Army Corps of Engineers, Kansas City District.
- Central Midlands Regional Planning Council
 1974 *An Inventory and Plan for the Preservation of Historical Properties in the Central Midlands Region.* Central Midlands Regional Planning Council, Columbia.
- Chapman, Jefferson
 1977 *Archaic Period Research in the Lower Little Tennessee River Valley, 1975: Icehouse Bottom, Harrison Branch, Thirty Acre Island, Calloway Island.* Report of Investigations 18. University of Tennessee, Knoxville.
- 1985a Archaeology and the Archaic Period in the Southern Ridge-and-Valley Province. In *Structure and Process in Southeastern Archaeology*, edited by Roy S. Dickens and H. Trawick Ward, pp. 137-179. The University of Alabama Press, University.
- 1985b *Tellico Archaeology: 12,000 Years of Native American History.* Reports of Investigations 43, Occasional Paper 5, University of Tennessee, Knoxville.
- Charles, Tommy and James L. Michie
 1992 South Carolina Paleo Point Data.

SOURCES CITED

- In *Paleoindian and Early Archaic Period Research in the Lower Southeast: A South Carolina Perspective*, edited by David G. Anderson, Kenneth E. Sassaman, and Christopher Judge, pp. 242-247. Council of South Carolina Professional Archaeologists, Columbia
- Coe, Joffre
1964 *The Formative Cultures of the Carolina Piedmont*. Transactions of the American Philosophical Society 54(5).
- Daniel, I. Randolph, Jr.
1992 Early Archaic Settlement in the Southeast: A North Carolina Perspective. In *Paleoindian and Early Archaic Period Research in the Lower Southeast: A South Carolina Perspective*, edited by David G. Anderson, Kenneth E. Sassaman, and Christopher Judge, pp. 68-77. Council of South Carolina Professional Archaeologists, Columbia.
- DeBow, J.D.B.
1954 *Statistical View of the United States*. A.O.P. Nicholson, Washington, D.C.
- DeFrancesco, Dennis J.
1988 *Soil Survey of Orangeburg County, South Carolina*. U.S. Department of Agriculture, Soil Conservation Service, Washington, D.C.
- DePratter, Chester
1988 Indian Occupations of the Savannah River Valley During the Late Prehistoric and Early Historic Periods. Manuscript in the possession of the author.
- Derting, Keith M., Sharon L. Pekrul, and Charles J. Rinehart
1991 *A Comprehensive Bibliography of South Carolina Archaeology*. Research Manuscript 211. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.
- Drucker, Lesley
1977 *Archaeological Survey of the Proposed Twelve Mile Creek Interceptor: Final Report*. Carolina Archaeological Services, Columbia.
- Duke, James A.
1961 The psammophytes of the Carolina Fall-Line Sandhills. *Journal of the Elisha Mitchell Scientific Society* 77:3-24.
- Edgar, Walter
1998 *South Carolina: A History*. University of South Carolina Press, Columbia.
- Ferguson, Leland G.
1971 *South Appalachian Mississippian*. Ph.D. dissertation, University of North Carolina, Chapel Hill. University Microfilms, Ann Arbor, Michigan.
- Fick, Sarah and David Schneider
1988 *Aiken County -- East, South Carolina: Historical and Architectural Inventory*. Preservation Consultants, Charleston, South Carolina.
- Glatthaar, Joseph T.
1985 *The March to the Sea and Beyond*. Louisiana State University Press, Baton Rouge.
- Goodyear, Albert C.
1975 *Archaeological Survey of the*

- Proposed Alternate Three Route, Southern Alternate, of the Southwestern Columbia Beltway between I-26 and S.C. 48. Research Manuscript Series 77. S.C. Institute of Archaeology and Anthropology, Columbia.*
- Washington, D.C.
- 1976 *Soil Survey of Lexington County, South Carolina. U.S.D.A., Soil Conservation Service, Washington, D.C.*
- Goodyear, Albert C., John H. House, and Neal W. Ackerly
- 1979 *Laurens-Anderson: An Archaeological Study of the Inter-Riverine Piedmont. Anthropological Studies 4, Occasional Papers of the Institute of Archaeology and Anthropology, University of South Carolina, Columbia.*
- Lowry, M.W.
- 1934 *Reconnaissance Erosion Survey of the State of South Carolina. U.S. Department of Agriculture, Soil Conservation Service, Washington, D.C.*
- Gunn, Joel D. And Kathy Wilson
- 1993 *Archaeological Data Recovery Investigations at Sites 38CT54 and 38CT58 Along the S.C. 151 Jefferson Bypass, Chesterfield County, South Carolina. Garrow and Associates, Raleigh. Submitted to the S.C. Department of Highways and Public Transportation, Columbia.*
- Meriwether, Robert L.
- 1940 *The Expansion of South Carolina, 1729-1765. Southern Publishers, Kingsport, Tennessee.*
- Harmon, Michael A.
- 1980 *Archaeological Survey and Testing Program Along Six Mile Creek, Lexington County, South Carolina. Research Manuscript Series 103. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.*
- Michie, James
- 1970 *Excavation at Tom's Creek. Notebook 1(10):2-16.*
- 1971 *Excavations at the Taylor Site. Paper presented at the 27th Southeastern Archaeological Conference, Columbia, South Carolina.*
- Kovacik, Charles F. and John J. Winberry
- 1987 *South Carolina: The Making of a Landscape. University of South Carolina Press, Columbia.*
- Mills, Robert
- 1972 [1826] *Statistics of South Carolina. Reprinted. The Reprint Press, Spartanburg, South Carolina.*
- Lawrence, Carl B.
- 1963 *Soil Survey of Calhoun County, South Carolina. U.S.D.A., Soil Conservation Service,*

SOURCES CITED

Oliver, Billy L.

- 1981 *The Piedmont Tradition: Refinement of the Savannah River Stemmed Point Type*. Unpublished Master's thesis, Department of Anthropology, University of North Carolina, Chapel Hill.

- 1985 Tradition and Typology: Basic Elements of the Carolina Projectile Point Sequence. In *Structure and Process in Southeastern Archaeology*, edited by Roy S. Dickens and H. Trawick Ward, pp. 195-211. The University of Alabama Press, University.

Phelps, David A.

- 1983 Archaeology of the North Carolina Coast and Coastal Plain: Problems and Hypotheses. In *The Prehistory of North Carolina: An Archaeological Symposium*, edited by Mark A. Mathis and Jeffrey J. Crow, pp. 1-52. North Carolina Division of Archives and History, Department of Cultural Resources, Raleigh.

Rogers, Vergil A.

- 1985 *Soil Survey of Aiken County Area, South Carolina*. United State Department of Agriculture. Soil Conservation Service, Washington, D.C.

Ryan, Thomas M.

- 1972 *Archaeological Survey of the Columbia Zoological Park, Richland and Lexington Counties, South Carolina*. Research Manuscript Series 37. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

Sassaman, Kenneth E.

- 1983 *Middle and Late Archaic Settlement in the South Carolina Piedmont*. Unpublished master's thesis. Department of Anthropology, University of South Carolina, Columbia.

- 1985 A Preliminary Typological Assessment of MALA Hafted Bifaces from the Pen Point Site, Barnwell County, South Carolina. *South Carolina Antiquities* 17:1-17.

- 1993 *Early Woodland Settlement in the Aiken Plateau: Archaeological Investigations at 38AK157, Savannah River Site, Aiken County, South Carolina*. Savannah River Archaeological Research Papers 3. South Carolina Institute of Archaeology and Anthropology, University of South Carolina, Columbia.

- 1995 The Cultural Diversity of Interactions Among Mid-Holocene Societies of the American Southeast. In *Native American Interactions: Multiscalar Analyses and Interpretation in the Eastern Woodlands*, edited by Michael Nassaney and Kenneth E. Sassaman, pp. 174-204. University of Tennessee Press, Knoxville.

Sassaman, Kenneth E. and David G. Anderson

- 1990 Typology and Chronology. In *Native-American Prehistory of the Middle Savannah River Valley*, edited by Kenneth E. Sassaman, Mark J. Brooks, Glen T. Hanson, and David G. Anderson, pp. 143-216. Savannah River Archaeological Research Publication 1. South Carolina Institute of Archaeology and

- Anthropology, University of South Carolina, Columbia.
- 1994 *Middle and Late Archaic Archaeological Records of South Carolina: A Synthesis for Research and Resource Management*. Council of South Carolina Professional Archaeologists, Columbia.
- Sassaman, Kenneth E., Mark J. Brooks, Glen T. Hanson, and David G. Anderson
- 1990 *Native American Prehistory of the Middle Savannah River Valley*. Savannah River Archaeological Research Papers 1. Occasional Papers of the Savannah River Archaeological Research Program, South Carolina Institute of Archaeology and Anthropology, University of South Carolina.
- South, Stanley A.
- 1959 *A Study of the Prehistory of the Roanoke Rapids Basin*. Master's thesis, Department of Sociology and Anthropology, University of North Carolina, Chapel Hill.
- Townsend, Jan, John H. Sprinkle, Jr., and John Knoerl
- 1993 *Guidelines for Evaluating and Registering Historical Archaeological Sites and Districts*. Bulletin 36. National Park Service, National Register of Historic Places, Washington, D.C.
- Trimble, Stanley W.
- 1974 *Man-Induced Soil Erosion on the Southern Piedmont, 1700-1970*. Soil Conservation Society of American, Ankey, Iowa.
- Trinkley, Michael
- 1973 Archaeological Survey to locate Fort Congaree. Institue of Archaeology and Anthropology, University of South Carolina, manuscript
- 1981 *Typology of Thom's Creek Pottery for the South Carolina Coast*. Unpublished M.A. Thesis, Department of Anthropology, University of North Carolina, Chapel Hill.
- 1980 *Investigation of the Woodland Period along the South Carolina Coast*. Ph.D. dissertation. Department of Anthropology, University of North Carolina, Chapel Hill.
- 1990 *An Archaeological Context for the South Carolina Woodland Period*. Chicora Foundation Research Series 22. Chicora Foundation, Inc., Columbia, S.C.
- Trinkley, Michael, Debi Hacker, and Natalie Adams
- 1993 *Life in the Pee Dee: Prehistoric and Historic Research on the Roche Carolina Tract, Florence County, South Carolina*. Research Series 39. Chicora Foundation, Inc., Columbia.
- Vivian, Daniel J.
- n.d. *South Carolina Statewide Survey of Historic Properties*. S.C. Department of Archives and History, Columbia.
- Walthall, John A.
- 1980 *Prehistoric Indians of the Southeast: Archaeology of Alabama*. University of Alabama Press, University.
- Ward, Trawick
- 1983 A Review of Archaeology in the North Carolina Piedmont: A Study in Change. In *The*

SOURCES CITED

Prehistory of North Carolina An Archaeological Symposium. Edited by Mark A. Mathis and Jeffrey J. Crow, pp. 53-81. North Carolina Division of Archives and History, Raleigh.

Waring, Antonio J., Jr.

- 1968 The Refuge Site, Jasper County, South Carolina. In *The Waring Papers: The Collected Works of Antonio J. Waring, Jr.*, edited by Stephen B. Williams, pp. 198-208. Papers of the Peabody Museum of Archaeology and Ethnology 58.

Williams, Stephen B., editor

- 1965 *The Paleo-Indian Era: Proceedings of the 20th Southeastern Archaeological Conference*. Bulletin 2. Southeastern Archaeological Conference.

Wogaman, Ronald W., John H. House, and Albert C. Goodyear

- 1976 *Archaeological Reconnaissance of the Four Proposed Twelfth Street Extension Routes, Lexington County, South Carolina*. Research Manuscript Series 106. South Carolina Institute of Archaeology and Anthropology.

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